

Form PTO-1449 U.S. Department of Commerce

(REV. 8-83) Patent and Trademark Office

## INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Atty. Docket No.  
ENZ-61 (D8)

Serial No. 10/764,389

Applicants: Ilan, et al

Filed: January 23, 2004

Group: Not yet known

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPRO- PRIATE
u		5	4	9	4	8	1	0		Barany, et al			
		6	0	0	4	2	8	6		Bellhouse, et al			
		5	5	8	2	9	8	4		Bieniarz, et al			
		5	5	9	9	9	3	2		Bieniarz, et al			
		4	9	7	8	6	1	4		Bronstein, IY			
u		5	4	6	2	8	5	4		Coassin, et al			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	TRANS- LATION YES NO	
u	EP	0	6	6	7	3	9	3	8/16/95	Rabbani et al	A1			
u	EP	0	0	7	0	6	8	5	7/14/82	Heller, et al	A1			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

u		Ball, et al., "The use of tailed octamer primers for cycle sequencing," <u>Nucl. Acids. Res.</u> 26:5225-5227 (1998)
		Baranov, et al., "A new technique for the characterization of long-range tertiary contacts in large RNA molecules: insertion of a photolabel at a selected position in 16S rRNA within the Escherichia coli ribosome," <u>Nucl. Acids Res.</u> 25:2266-2273 (1997)
		Dale, R.M., et al., "Direct covalent mercuration of nucleotides and polynucleotides," <u>Biochemistry</u> 14:2447-2457 (1975)
		Dale, R.M., et al., "The synthesis and enzymatic polymerization of nucleotide containing mercury: potential tools for nucleic acid sequencing and structural analysis," <u>Proc. Natl. Acad. Sci. USA</u> 70:2238-2242 (1973)
		Doan, T.L., et al., "Targeted cleavage of polynucleotides by complementary oligonucleotides covalently linked to iron-porphyrins," <u>Biochemistry</u> 25:6736-6739 (1986)
u		Eglinton, G., et al., "A coupling of acetylenic compounds," <u>Adv. Organic Synthesis</u> 4:225-328 (1963)

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u	5 8 4 9 4 8 0		Cros, et al			
	4 8 9 4 3 2 5		Engelhardt, et al			
	5 2 4 1 0 6 0		Engelhardt, et al			
	5 2 8 8 6 0 9		Engelhardt, et al			
	6 2 2 1 5 8 1		Engelhardt, et al			
	4 3 7 5 9 7 2		Forgione, et al			
u	5 2 1 0 0 1 5		Gelfand, et al			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRAN- SLATION YES NO
u	WO 9 9 2 8 5 0 0	11/27/98	Lee, et al			
u	EP 0 9 1 7 0 3 9	1/12/00	Rabbani, et al	A1		

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

u	Enzo Biochem, Catalog Nos. 42722, 4723, 4724, New York, NY
	Ernst, et al., "Cyanine dye labeling reagents for sulfhydryl groups," <u>Cytometry</u> 10:3-10 (1989)
	Fuhrop, J.H., et al., Chapter 19 in "Porphyrins and Metalloporphyrins," ed. Smith, K.M., Elsevier Science, New York (1975)
	Kawase, et al., "Studies on nucleic acid interactions. I. Stabilities of mini-duplexes (dG2A4XA4G2-dC2T4YT4C2) and self-complementary d(GGGAAXYTTCCC) containing deoxyinosine and other mismatched bases," <u>Nucl. Acids. Res.</u> 14:7727-7736 (1986)
	Kuhlmann, K.F., et al., "Synthesis, DNA-binding and biological activity of a double intercalating analog of ethidium bromide," <u>Nucl. Acids. Res.</u> 5:2629-2633 (1978)
u	Larock, "Organomercurials in Organic Synthesis," <u>Tetrahedron</u> 38:1713-1754 (1982)

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2		6	3	3	8	9	5	4		Gemen, B.			
		5	6	4	6	2	6	4		Glazer, et al			
		5	2	4	8	6	1	8		Haces, A.			
		5	7	3	0	8	4	9		Hamby, et al			
		4	7	0	7	4	5	4		Hendrix, JL			
		5	4	6	4	7	4	1		Hendrix, JL			
		5	9	9	4	0	5	6		Higuchi, RG			
u		5	0	4	7	5	1	9		Hobbs, et al			

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2	EP	1	2	7	5	7	3	7	1/15/03	Rabbani, et al	A1			
u	EP	1	3	4	4	8	3	5	11/17/03	Rabbani, et al	A1			

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

2		Lee, L.G., et al., "DNA sequencing with dye-labeled terminators and T7 DNA polymerase: effect of dyes and dNTPs on incorporation of dye-terminators and probability analysis of termination fragments," <u>Nucl. Acids Res.</u> 20:2471-2488 (1992)
		Liu, H., et al., "PCR amplification using deoxyinosine to replace an entire codon and at ambiguous positions," <u>Biotechniques</u> 16:24-26 (1994)
		Liu, D., et al., "Stable human immunodeficiency virus type 1 (HIV-1) resistance in transformed CD4+ monocytic cells treated with multitargeting HIV-1 antisense sequences incorporated into U1 snRNA," <u>J. Virol</u> 71:4079-4085 (1997)
		Loakes, D., et al., "5-Nitroindole as an universal base analogue," <u>Nucl. Acids Res.</u> 22:4039-4043 (1994)
u		Loakes, D., "The applications of universal DNA base analogues," <u>Nucl. Acids Res.</u> 29:2437-2447 (2001)

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2	6 2 2 8 5 7 8		Impraim, et al			
	5 5 5 4 5 1 6		Kacien, et al			
	5 9 4 8 6 4 8		Kahn, et al			
	5 9 4 5 2 8 3		Kwok, et al			
	5 9 4 5 5 2 6		Lee, et al			
	5 1 1 8 8 0 1		Lizardi, et al			
	5 1 3 0 2 3 8		Malek, et al			
u	4 6 8 3 2 0 2		Mullis, et al			

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2	Maulding, D.R., et al., "Chemiluminescence from Reactions of Electrophilic Oxamides with Hydrogen Peroxide and Fluorescent Compounds," J. Org. Chem. 33:250-254 (1968)
	Moan, J., et al., "Porphyrin photosensitization and phototherapy," Photochem. Photobio. 43:681-690 (1986)
	Mujumdar, R.B., et al., "Cyanine dye labeling reagents containing isothiocyanate groups," Cytometry 10:11-19 (1989)
	Mujumdar, R.B., et al., "Cyanine dye labeling reagents: sulfoindocyanine succinimidyl esters," Bioconjugate Chemistry 4:105-111 (1993)
	Nichols, et al., "A universal nucleoside for use at ambiguous sites in DNA primers," Nature 369:492-493 (1994)
u	Okayama, H., et al., "High efficiency cloning of full length cDNA," Mol. Cell. Biol. 2:161 (1982)

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u	5 8 6 6 3 3 6		Nazarenko, et al			
	6 1 1 4 3 5 0		Randall, et al			
	6 1 1 0 6 3 0		Reddy, et al			
	6 0 0 1 5 7 3		Roalent, C.			
	5 7 0 7 5 5 9		Schaap, et al			
u	6 3 2 3 3 3 7		Singer, et al			

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u	Rieke, R.D., "The preparation of highly reactive metals and the development of novel organometallic reagents," <u>Aldrichimica Acta</u> 33:52-60 (2000)
	Robins, M.J., et al., "Nucleic Acid Related Compounds. 39. Efficient Conversion of 5-Iodo to 5-Alkynyl and Derived 5-Substituted Uracil Bases and Nucleosides," <u>J. Org. Chem.</u> 48:1854-1862 (1983)
	Schaap, et al., "Chemical and Enzymatic Triggering of 1,2-Dioxetanes. 1: Aryl Esterase-Catalyzed Chemiluminescence from a Naphthyl Acetate-Substituted 1,2-Dioxetane," <u>Tetrahedron Letters</u> 28:935-938 (1987)
	Schaap, A.P., et al., "Chemical and Enzymatic Triggering of 1,2-Dioxetanes. 3: Alkaline Phosphatase-Catalyzed Chemiluminescence from an Aryl Phosphate-Substituted Dioxetane," <u>Tetrahedron Letters</u> 28:1159-1163 (1987)
	Selinger, D.W., et al., "RNA expression analysis using a 30 base pair resolution <i>Escherichia coli</i> genome array," <u>Nature Biotech.</u> 18:1262-1268 (2000)
u	Shibahara, S., et al., "Site-directed cleavage of RNA," <u>Nucl. Acids Res.</u> 15:4403-4415 (1987)

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2	4 8 6 8 1 0 3		Stavrianopolous, et al			
	4 9 5 2 6 8 5		Stavrianopolous, et al			
	4 9 9 4 3 7 3		Stavrianopolous, et al			
	5 0 1 3 8 3 1		Stavrianopolous, et al			
	5 5 7 8 8 3 2		Trulson, et al			
	5 1 3 2 2 0 4		Urdea, et al			
	5 8 9 1 6 3 6		Van Gelder, et al			
u	5 2 6 8 4 8 6		Waggoner, et al			

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cy	Southwick, P.L., et al., "Cyanine dye labeling reagents - carboxymethylindocyanine succinimidyl esters," <u>Cytometry</u> 11:418-430 (1990)
	Talaat, A.M., et al., "Genome-directed primers for selective labeling of bacterial transcripts for DNA microarray analysis," <u>Nature Biotech.</u> 18:679-682 (2000)
	Tao, et al., "Genomics: Expression Analysis of Escherichia coli Growing on Minimal and Rich Media," <u>J. Bact.</u> 181:6425-6490 (1999)
	Wieringa, J.H., et al., "Adamantylideneadamantane Peroxide. A Stable 1,2 Dioxetane," <u>Tetrahedron Letters</u> 2:169-172 (1972)
u	Zhu, Z., et al., "Directly labeled DNA probes using fluorescent nucleotides with different length linkers," <u>Nucl. Acids. Res.</u> 22:3418-3422 (1994)

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<i>a</i>	5 6 2 7 0 2 7		Waggoner, et al			
	6 0 0 8 3 7 3		Waggoner, et al			
	5 2 7 0 1 8 4		Walker, et al			
	5 4 5 5 1 6 6		Walker, et al			
	4 7 1 1 9 5 5		Ward, et al			
	5 4 5 5 1 7 5		Wittwer, et al			
<i>u</i>	6 1 7 4 6 7 0		Wittwer, et al			

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